

Cold Weather Casualties and Injuries Chart

- Train soldiers on the proper use of cold weather clothing
- Remember the acronym C-O-L-D when wearing clothing in cold weather
(C: keep it Clean; O: avoid Overdressing; L: wear clothing Loose and in layers; D: keep clothing Dry)
- Maintain adequate hydration and ensure nutritional requirements are met

Cold Weather Casualties and Injuries			
Chilblain			
Cause	Symptoms	First-Aid	Prevention
<ul style="list-style-type: none"> ■ Repeated exposure of bare skin for prolonged periods from 20°-60°F with high humidity (for those not acclimated to cold weather). 	<ul style="list-style-type: none"> ■ Swollen, red skin (or darkening of the skin in dark-skinned soldiers). ■ Tender, hot skin, usually accompanied by itching. 	<ul style="list-style-type: none"> ■ Warm affected area with direct body heat. ■ Do not massage or rub affected areas. ■ Do not wet the area or rub it with snow or ice. ■ Do not expose affected area to open fire, stove, or any other intense heat source. 	<ul style="list-style-type: none"> ■ Use contact gloves to handle all equipment; never use bare hands to handle equipment, especially metal. ■ Use approved gloves to handle all fuel and POL* products. ■ In the extreme cold environment, do not remove clothing immediately after heavy exertion (PT); until you are in a warmer location. ■ Never wear cotton clothing in the cold weather environment.
Immersion foot (trench foot)			
Cause	Symptoms	First-Aid	Prevention
<ul style="list-style-type: none"> ■ Prolonged exposure of feet to wet conditions 32°-60°F. Inactivity and damp socks and boots (or tightly laced boots that impair circulation) speed onset and severity. 	<ul style="list-style-type: none"> ■ Cold, numb feet may progress to hot with shooting pains. ■ Swelling, redness, and bleeding. 	<ul style="list-style-type: none"> ■ If you suspect trench foot, get medical help immediately! ■ Re-warm feet by exposing them to warm air. ■ Do not allow victim to walk on injury. ■ Evacuate victim to a medical facility. ■ Do not massage, rub, moisten, or expose affected area to extreme heat. 	<ul style="list-style-type: none"> ■ Keep feet clean and dry; change wet or damp socks as soon as possible. ■ Wet or damp socks should be dried as soon as possible to allow them to be re-used. ■ The inside of Vapor Barrier boots should be wiped dry once per day, or more often as feet sweat. ■ Dry leather boots by stuffing with paper towels.
Frostbite			
Cause	Symptoms	First-Aid	Prevention
<ul style="list-style-type: none"> ■ Freezing of tissue. e.g.: fingers, toes, ears, and other facial parts. ■ Exposure to bare skin on metal, extremely cool fuel and POL*, wind chill, and tight clothing - particularly boots - can make the problem worse. 	<ul style="list-style-type: none"> ■ Numbness in affected area. ■ Tingling, blistered, swollen, or tender areas. ■ Pale, yellowish, waxy-looking skin (grayish in dark-skinned soldiers). ■ Frozen tissue that feels wooden to the touch. 	<ul style="list-style-type: none"> ■ Frostbite can lead to amputation! Evacuate immediately! ■ Start first-aid immediately. Warm affected area with direct body heat. ■ Do not thaw frozen areas if treatment will be delayed. ■ Do not massage or rub affected areas. ■ Do not wet the area or rub it with snow or ice. ■ Do not expose affected area to open fire, stove, or any other intense heat source. 	<ul style="list-style-type: none"> ■ Use contact gloves to handle all equipment; never use bare hands to handle equipment. ■ Use approved gloves to handle fuel and POL*. ■ Never wear cotton clothing in the cold weather environment. ■ Keep face and ears covered and dry. ■ Keep socks clean and dry. ■ Avoid tight socks and boots.
Hypothermia			
Cause	Symptoms	First-Aid	Prevention
<ul style="list-style-type: none"> ■ Prolonged cold exposure and body-heat loss. May occur at temperatures well above freezing, especially when a person is wet. 	<ul style="list-style-type: none"> ■ Shivering may or may not be present. ■ Drowsiness, mental slowness or lack of coordination. Can progress to unconsciousness, irregular heartbeat, and death. 	<ul style="list-style-type: none"> ■ This is the most serious cold exposure medical emergency and can lead to death! Get the soldier to a medical facility as soon as possible! ■ Even if a victim is cold and is not breathing, never assume someone is dead until determined by medical authorities! ■ Strip off wet clothing and wrap victim in blankets or a sleeping bag. ■ Place another person in sleeping bag as an additional heat source. ■ For the person with unconsciousness and very low heartbeat, minimize handling of the victim so as to not induce a heart attack. 	<ul style="list-style-type: none"> ■ Never wear cotton clothing in the cold weather environment. ■ Anticipate the need for warming areas for soldiers exposed to cold, wet conditions.
Additional Medical Considerations in the Cold Weather environment:			
Dehydration			
Cause	Symptoms	First-Aid	Prevention
<ul style="list-style-type: none"> ■ Depletion of body fluids. 	<ul style="list-style-type: none"> ■ Dizziness. ■ Weakness. ■ Blurred vision. 	<ul style="list-style-type: none"> ■ Replace lost water. Water should be sipped, not gulped. ■ Get medical treatment. 	<ul style="list-style-type: none"> ■ At a minimum drink 3-6 quarts of fluid per day.
Snow Blindness			
Cause	Symptoms	First-Aid	Prevention
<ul style="list-style-type: none"> ■ Burning of the cornea of the eye by exposure to intense UV rays of the sun in a snow-covered environment. 	<ul style="list-style-type: none"> ■ Pain, red, watery or gritty feeling in the eyes. 	<ul style="list-style-type: none"> ■ Rest and total darkness; bandage eyes with gauze. ■ Evacuate if no improvement within 24 hours. 	<ul style="list-style-type: none"> ■ Use sunglasses with side protection in a snow-covered environment. ■ If sunglasses are not available use improvised slit glasses.
Carbon Monoxide Poisoning			
Cause	Symptoms	First-Aid	Prevention
<ul style="list-style-type: none"> ■ Replacement of oxygen with carbon monoxide in the blood stream caused by burning fuels without proper ventilation. 	<ul style="list-style-type: none"> ■ Headache, confusion, dizziness, excessive yawning. ■ Cherry red lips and mouth, grayish tint to lips and mouth (in dark-skinned individuals). ■ Unconsciousness. 	<ul style="list-style-type: none"> ■ Move to fresh air. ■ CPR if needed. ■ Administer oxygen if available. Evacuate. 	<ul style="list-style-type: none"> ■ Use only Army-approved heaters in sleeping areas and ensure that personnel are properly licensed to operate the heaters. ■ Never sleep in running vehicles. ■ Always post a fire guard when operating a heater in sleeping areas.